

**Amendments to the Claims:**

This listing of claims will replace all prior versions, and listings, of claims in the application.

**Listing of Claims:**

1-22. (canceled).

23. (original) A kit for amplifying a portion of a human FEZ1 gene, the kit comprising a first isolated polynucleotide and a second isolated polynucleotide, wherein the first isolated polynucleotide comprises a portion which anneals with high stringency with at least twenty consecutive nucleotide residues of the coding strand of SEQ ID NO: 1, and wherein the second isolated polynucleotide comprises a portion which anneals with high stringency with at least twenty consecutive nucleotide residues of the non-coding strand of SEQ ID NO:1.

24. (original) A kit for amplifying a portion of a cDNA generated from a transcript of a human FEZ1 gene, the kit comprising a first isolated polynucleotide and a second isolated polynucleotide, wherein a portion of the first isolated polynucleotide anneals with high stringency with at least twenty consecutive nucleotide residues of the coding strand of SEQ ID NO: 1, and wherein a portion of the second isolated polynucleotide anneals with high stringency with at least twenty consecutive nucleotide residues of the non-coding strand of SEQ ID NO: 1.

25-157. (canceled).

158. (new) An isolated polynucleotide comprising a sequence that anneals under conditions of high stringency to a nucleic acid having the sequence of:

- i) SEQ ID NO: 1;
- ii) the complement of SEQ ID NO: 1;
- iii) SEQ ID NO: 2;
- iv) the complement of SEQ ID NO: 2;

v) SEQ ID NO: 3; or

vi) the complement of SEQ ID NO: 3;

wherein said isolated polynucleotide encodes a protein that binds a compound selected from the group consisting of an amino-terminal 40 KDa fragment of Fez 1, tubulin, EF1- $\gamma$ , and an amino terminal 153-amino acid fragment of EF1- $\gamma$ .

159. (new) The isolated polynucleotide of claim 158, wherein said isolated polynucleotide anneals under conditions of high stringency to a nucleic acid having the sequence of SEQ ID NO: 1.

160. (new) The isolated polynucleotide of claim 158, wherein said isolated polynucleotide anneals under conditions of high stringency to a nucleic acid having the sequence of the complement of SEQ ID NO: 1.

161. (new) The isolated polynucleotide of claim 158, wherein said isolated polynucleotide anneals under conditions of high stringency to a nucleic acid having the sequence of SEQ ID NO: 2.

162. (new) The isolated polynucleotide of claim 158, wherein said isolated polynucleotide anneals under conditions of high stringency to a nucleic acid having the sequence of the complement of SEQ ID NO: 2.

163. (new) The isolated polynucleotide of claim 158, wherein said isolated polynucleotide anneals under conditions of high stringency to a nucleic acid having the sequence of SEQ ID NO: 3.

164. (new) The isolated polynucleotide of claim 158, wherein said isolated polynucleotide anneals under conditions of high stringency to a nucleic acid having the sequence of the complement of SEQ ID NO: 3.

165. (new) The isolated polynucleotide of claim 158 further comprising a promoter operably linked to said sequence.

166. (new) The isolated polynucleotide of claim 165, wherein said promoter is selected from the group consisting of a constitutive promoter, an inducible promoter and a tissue specific promoter.

167. (new) The isolated polynucleotide of claim 158, wherein said protein inhibits tubulin polymerization.

168. (new) The isolated polynucleotide of claim 158, wherein said protein inhibits cellular proliferation.

169. (new) The isolated polynucleotide of claim 158, wherein said protein is a tumor suppressor.

170. (new) A nucleic acid vector comprising the isolated polynucleotide of claim 158.

171. (new) The nucleic acid vector of claim 170 selected from the group consisting of a plasmid, an expression vector and a virus vector.

172. (new) An isolated cell comprising the nucleic acid vector of claim 170.

173. (new) An isolated polynucleotide comprising a sequence that is substantially complementary to a nucleic acid having the sequence of:

i) SEQ ID NO: 1; or

ii) the complement of SEQ ID NO: 1;

wherein said isolated polynucleotide encodes a protein that binds a compound selected from the group consisting of an amino-terminal 40 KDa fragment of Fez 1, tubulin, EF1- $\gamma$ , and an amino terminal 153-amino acid fragment of EF1- $\gamma$ .

174. (new) The isolated polynucleotide of claim 173 further comprising a promoter operably linked to said sequence.

175. (new) The isolated polynucleotide of claim 174, wherein said promoter is selected from the group consisting of a constitutive promoter, an inducible promoter and a tissue specific promoter.

176. (new) The isolated polynucleotide of claim 173, wherein said protein inhibits tubulin polymerization.

177. (new) The isolated polynucleotide of claim 173, wherein said protein inhibits cellular proliferation.

178. (new) The isolated polynucleotide of claim 173, wherein said protein is a tumor suppressor.

179. (new) A nucleic acid vector comprising the isolated polynucleotide of claim 173.

180. (new) The nucleic acid vector of claim 179 selected from the group consisting of a plasmid, an expression vector and a virus vector.

181. (new) An isolated cell comprising the nucleic acid vector of claim 179.

182. (new) An isolated polynucleotide comprising a sequence that is substantially complementary to a nucleic acid having the sequence of:

- i) SEQ ID NO: 2; or
- ii) the complement of SEQ ID NO: 2;

wherein said isolated polynucleotide encodes a protein that binds a compound selected from the group consisting of an amino-terminal 40 KDa fragment of Fez 1, tubulin, EF1- $\gamma$ , and an amino terminal 153-amino acid fragment of EF1- $\gamma$ .

183. (new) The isolated polynucleotide of claim 182 further comprising a promoter operably linked to said sequence.

184. (new) The isolated polynucleotide of claim 183, wherein said promoter is selected from the group consisting of a constitutive promoter, an inducible promoter and a tissue specific promoter.

185. (new) The isolated polynucleotide of claim 182, wherein said protein inhibits tubulin polymerization.

186. (new) The isolated polynucleotide of claim 182, wherein said protein inhibits cellular proliferation.

187. (new) The isolated polynucleotide of claim 182, wherein said protein is a tumor suppressor.

188. (new) A nucleic acid vector comprising the isolated polynucleotide of claim 182.

189. (new) The nucleic acid vector of claim 188 selected from the group consisting of a plasmid, an expression vector and a virus vector.

190. (new) An isolated cell comprising the nucleic acid vector of claim 188.

191. (new) An isolated polynucleotide comprising a sequence that is substantially complementary to a nucleic acid having the sequence of:

i) SEQ ID NO: 3; or

ii) the complement of SEQ ID NO: 3;

wherein said isolated polynucleotide encodes a protein that binds a compound selected from the group consisting of an amino-terminal 40 KDa fragment of Fez 1, tubulin, EF1- $\gamma$ , and an amino terminal 153-amino acid fragment of EF1- $\gamma$ .

192. (new) The isolated polynucleotide of claim 191 further comprising a promoter operably linked to said sequence.

193. (new) The isolated polynucleotide of claim 192, wherein said promoter is selected from the group consisting of a constitutive promoter, an inducible promoter and a tissue specific promoter.

194. (new) The isolated polynucleotide of claim 191, wherein said protein inhibits tubulin polymerization.

195. (new) The isolated polynucleotide of claim 191, wherein said protein inhibits cellular proliferation.

196. (new) The isolated polynucleotide of claim 191, wherein said protein is a tumor suppressor.

197. (new) A nucleic acid vector comprising the isolated polynucleotide of claim 191.

198. (new) The nucleic acid vector of claim 197 selected from the group consisting of a plasmid, an expression vector and a virus vector.

199. (new) An isolated cell comprising the nucleic acid vector of claim 197.

200. (new) An isolated polynucleotide comprising a sequence that anneals under conditions of high stringency to a nucleic acid having the sequence of:

- i) SEQ ID NO: 1;
- ii) the complement of SEQ ID NO: 1;
- iii) SEQ ID NO: 2;
- iv) the complement of SEQ ID NO: 2;
- v) SEQ ID NO: 3; or
- vi) the complement of SEQ ID NO: 3;

wherein said isolated polynucleotide encodes a protein that has an activity selected from the group consisting of inhibiting cellular proliferation and tumor suppression.

201. (new) The isolated polynucleotide of claim 200, wherein said isolated polynucleotide anneals under conditions of high stringency to a nucleic acid having the sequence of SEQ ID NO: 1.

202. (new) The isolated polynucleotide of claim 200, wherein said isolated polynucleotide anneals under conditions of high stringency to a nucleic acid having the sequence of the complement of SEQ ID NO: 1.

203. (new) The isolated polynucleotide of claim 200, wherein said isolated polynucleotide anneals under conditions of high stringency to a nucleic acid having the sequence of SEQ ID NO: 2.

204. (new) The isolated polynucleotide of claim 200, wherein said isolated polynucleotide anneals under conditions of high stringency to a nucleic acid having the sequence of the complement of SEQ ID NO: 2.

205. (new) The isolated polynucleotide of claim 200, wherein said isolated polynucleotide anneals under conditions of high stringency to a nucleic acid having the sequence of SEQ ID NO: 3.

206. (new) The isolated polynucleotide of claim 200, wherein said isolated polynucleotide anneals under conditions of high stringency to a nucleic acid having the sequence of the complement of SEQ ID NO: 3.

207. (new) The isolated polynucleotide of claim 200 further comprising a promoter operably linked to said sequence.

208. (new) The isolated polynucleotide of claim 207, wherein said promoter is selected from the group consisting of a constitutive promoter, an inducible promoter and a tissue specific promoter.

209. (new) A nucleic acid vector comprising the isolated polynucleotide of claim 200.

210. (new) The nucleic acid vector of claim 209 selected from the group consisting of a plasmid, an expression vector and a virus vector.

211. (new) An isolated cell comprising the nucleic acid vector of claim 209.

212. (new) An isolated polynucleotide comprising a sequence that is substantially complementary to a nucleic acid having the sequence of:

- i) SEQ ID NO: 1;
- ii) the complement of SEQ ID NO: 1;
- iii) SEQ ID NO: 2;
- iv) the complement of SEQ ID NO: 2;
- v) SEQ ID NO: 3; or
- vi) the complement of SEQ ID NO: 3;

wherein said isolated polynucleotide encodes a protein that inhibits cellular proliferation.



213. (new) The isolated polynucleotide of claim 212, wherein said isolated polynucleotide is substantially complementary to a nucleic acid having the sequence of SEQ ID NO: 1.

214. (new) The isolated polynucleotide of claim 212, wherein said isolated polynucleotide is substantially complementary to a nucleic acid having the sequence of the complement of SEQ ID NO: 1.

215. (new) The isolated polynucleotide of claim 212, wherein said isolated polynucleotide is substantially complementary to a nucleic acid having the sequence of SEQ ID NO: 2.

216. (new) The isolated polynucleotide of claim 212, wherein said isolated polynucleotide is substantially complementary to a nucleic acid having the sequence of the complement of SEQ ID NO: 2.

217. (new) The isolated polynucleotide of claim 212, wherein said isolated polynucleotide is substantially complementary to a nucleic acid having the sequence of SEQ ID NO: 3.

218. (new) The isolated polynucleotide of claim 212, wherein said isolated polynucleotide is substantially complementary to a nucleic acid having the sequence of the complement of SEQ ID NO: 3.

219. (new) The isolated polynucleotide of claim 212 further comprising a promoter operably linked to said sequence.

220. (new) The isolated polynucleotide of claim 219, wherein said promoter is selected from the group consisting of a constitutive promoter, an inducible promoter and a tissue specific promoter.

221. (new) A nucleic acid vector comprising the isolated polynucleotide of claim 212.

222. (new) The nucleic acid vector of claim 221 selected from the group consisting of a plasmid, an expression vector and a virus vector.

223. (new) An isolated cell comprising the nucleic acid vector of claim 221.

224. (new) An isolated polynucleotide comprising a sequence that is substantially complementary to a nucleic acid having the sequence of:

- i) SEQ ID NO: 1;
- ii) the complement of SEQ ID NO: 1;
- iii) SEQ ID NO: 2;
- iv) the complement of SEQ ID NO: 2;
- v) SEQ ID NO: 3; or
- vi) the complement of SEQ ID NO: 3;

wherein said isolated polynucleotide encodes a protein that is a tumor suppressor.

225. (new) The isolated polynucleotide of claim 224, wherein said isolated polynucleotide is substantially complementary to a nucleic acid having the sequence of SEQ ID NO: 1.

226. (new) The isolated polynucleotide of claim 224, wherein said isolated polynucleotide is substantially complementary to a nucleic acid having the sequence of the complement of SEQ ID NO: 1.

227. (new) The isolated polynucleotide of claim 224, wherein said isolated polynucleotide is substantially complementary to a nucleic acid having the sequence of SEQ ID NO: 2.

228. (new) The isolated polynucleotide of claim 224, wherein said isolated polynucleotide is substantially complementary to a nucleic acid having the sequence of the complement of SEQ ID NO: 2.

229. (new) The isolated polynucleotide of claim 224, wherein said isolated polynucleotide is substantially complementary to a nucleic acid having the sequence of SEQ ID NO: 3.

230. (new) The isolated polynucleotide of claim 224, wherein said isolated polynucleotide is substantially complementary to a nucleic acid having the sequence of the complement of SEQ ID NO: 3.

231. (new) The isolated polynucleotide of claim 224 further comprising a promoter operably linked to said sequence.

232. (new) The isolated polynucleotide of claim 231, wherein said promoter is selected from the group consisting of a constitutive promoter, an inducible promoter and a tissue specific promoter.

233. (new) A nucleic acid vector comprising the isolated polynucleotide of claim 224.

234. (new) The nucleic acid vector of claim 233 selected from the group consisting of a plasmid, an expression vector and a virus vector.

235. (new) An isolated cell comprising the nucleic acid vector of claim 233.

236. (new) An isolated polynucleotide comprising a nucleotide sequence that encodes a protein comprising the amino acid sequence of SEQ ID NO: 4.

237. (new) The isolated polynucleotide of claim 236 wherein the isolated polynucleotide encodes the polypeptide of SEQ ID NO: 4.

238. (new) The isolated polynucleotide of claim 236 further comprising a promoter operably linked to said sequence.

239. (new) The isolated polynucleotide of claim 238, wherein said promoter is selected from the group consisting of a constitutive promoter, an inducible promoter and a tissue specific promoter.

240. (new) A nucleic acid vector comprising the isolated polynucleotide of claim 236.

241. (new) The nucleic acid vector of claim 240 selected from the group consisting of a plasmid, an expression vector and a virus vector.

242. (new) An isolated cell comprising the nucleic acid vector of claim 240.

243. (new) An isolated polynucleotide comprising a nucleotide sequence that encodes a protein comprising an amino terminal 40 KDa fragment of the sequence of SEQ ID NO: 4.

244. (new) The isolated polynucleotide of claim 243 wherein the isolated polynucleotide encodes the amino terminal 40 KDa fragment of the sequence of SEQ ID NO: 4.

245. (new) The isolated polynucleotide of claim 243 further comprising a promoter operably linked to said sequence.

246. (new) The isolated polynucleotide of claim 245, wherein said promoter is selected from the group consisting of a constitutive promoter, an inducible promoter and a tissue specific promoter.

247. (new) A nucleic acid vector comprising the isolated polynucleotide of claim 243.

248. (new) The nucleic acid vector of claim 247 selected from the group consisting of a plasmid, an expression vector and a virus vector.

249. (new) An isolated cell comprising the nucleic acid vector of claim 247.